

Fossils from the Gulf Watershed.

THE bones from the Leichhardt River lately collected under the auspices of the Department of Agriculture by Mr. Stock Inspector Buhot, and referred to me for examination, have not the good fortune to increase to any notable extent our knowledge of the extinct fauna represented by them. The animals which once owned them were few both in number and kind compared with the wealth of diverse forms which in their day of life the country was nurturing. Moreover, the relics are almost invariably mere fragments, greater or less in size, and sometimes also much waterworn—conditions easily acquired during a rough passage down the bed of a river, but naturally rendering them difficult of study.

Of the 43 which have escaped utter destruction and retain features helpful to recognition, eight were of reptilian origin. The remainder were derived from marsupial mammals and mostly from those giants of the Order whose bones were massive enough to partially resist the shocks and attrition to which they have been subjected.

Most of the fossils were, by the foresight of Mr. Buhot, marked with distinguishing numbers, each indicating the precise locality of collection. Numbers 1 to 6 and No. 34 are from "the top crossing" of the river, 7 miles below Augustus Station; Nos. 7 to 16 from Floraville Post Office; Nos. 17 to 46 (No. 34 excepted) from the river bed and conglomerate on the banks at Floraville Crossing. The retention of these numbers may possibly be of use should further investigation on the spot be undertaken.

The contents of the collection are specified below under the name of the animal to which each bone is thought, with certitude more or less perfect, to belong. Until bones of most of the very numerous species now extinct occur in organic connection with skull or teeth, or in company with them so close that no doubt can remain about their specific identity, their ascription to one or other species or even genus is entirely a matter of opinion liable at any time to be proved erroneous by fresh discovery.

MAMMALIA—MARSUPIALIA.

FAMILY NOTOTHERIIDÆ.

DIPROTODON AUSTRALIS, Owen.

The unequalled size of bones of the Greater Diprotodon renders them easy of recognition :—

Right ramus of a mandible, with the symphysis and roots of the incisor tusks and with the last three molars (the hinder lobe of No. 3 excepted) in place; the ascending process wanting.—No. 31.

- Vault of a cranium from the occiput to the middle of the orbit, but lacking the occipital condyles and the zygomas.—No. 16.
- Hinder part of the ascending process of a left mandible; condyle imperfect.—No. 30.
- Left ramus, symphysis, roots of incisor tusks, basal region of ascending process and last two molars of a mandible.—No. 24.
- Basal half of a left tusk socketed in a fragment of a mandible.—Nos. 31 and 34.
- Part of a tusk—No. 32.
- Left moiety of an axis vertebra.—No. 23.
- An imperfect lumbar vertebra devoid of processes—No. 1.
- Distal end of a right femur.—No. 9.
- Fragment of bone.—No. 38.

SIMOPROSOPUS, n.g.

It has fallen to my lot to take exception more than once to Owen's identification of the skull named *Zygomaturus* by Macleay with the mandibles to which the former had given the generic name *Nototherium*. I cannot but think that sufficient evidence of the incorrectness of the disputed decision has already been adduced; nevertheless, the support of the jaw mentioned below is far from unwelcome. Unfortunately, Macleay failed to observe the rule which strictly requires that a new name shall be announced in a publication addressed to the scientific world. This can hardly be said of the "Sydney Morning Herald," the sole repository of the name used by the author at its inception. Under these circumstances it becomes necessary that the genus should receive a new name, and for an emphatically flat-faced, snub-nosed creature the one above written seems appropriate.

SIMOPROSOBUS TRILOBUS MACL.

Posterior moiety of a left mandible with the penultimate molar m.2 in place and remains of the last molar, m.3. The diameter of this jaw, drawn through the roots of m.3, is 85mm. in length, the index of a massiveness far exceeding any to be found in typical mandibles of *Nototherium*, yet the teeth are no larger than those of *N. mitchelli*; they are about the same in length, but inferior in breadth.—No. 39. It was from the locality indicated by this number (Floraville) that the mandible brought under the notice of the Royal Society of Queensland (October, 1894) was procured.

Hinder portion of a cranial vault, broken and imperfect.—No. 14.

Fragment of a jaw, with remains of two molars.—No. 10.

Distal end of a femur, much waterworn.—No number.

Large fragment from the middle of a long bone.—No. 17. This, however, may be from the Lesser Diprotodon, *D. minor*, *Hux.*

Outer condyle of a femur.—No. 23.

NOTOTHERIUM MITCHELLI, Owen.

Part of the centrum of a dorsal vertebra.—No. 2.

Fragment of a mandible, with remains of two molars.—Nos. 3 and 10.

A long and broad plate of bone which, so far as can be seen of it, appears from certain indications to be the blade of a scapula, much weathered and broken before burial and now encrusted with matrix which it is not worth while to remove.—No. 25.

Distal end of a femur, imperfect —No number.

Piece of a rib.—No. 33.

Distal moiety of a humerus minus the articular region.—Nos 2 and 8. In the like condition and probably from the same skeleton as No. 25.

Fragment from the middle of a humerus —No. 13.

Piece of the head of a tibia (?).—No. 44. A fragment difficult to determine satisfactorily.

A fragment of a long bone with tooth marks of Thylacoleo.—No number.

EUOWENIA GRATA, de Vis.

Part of a lumbar vertebra.—No. 2.

Portion of a mandible —No. 12,

Greater part of a young ulna, wanting the epiphysis at the proximal end and a portion of the shaft with its articulating surface at the distal end.—No. 35. If this is rightly determined, *Euowenia* had a longer forearm than other *Nototheres*.

MACROPODIDÆ.

We know certain bones of one extinct kangaroo—*Macropus faunus*—but it would hardly be judicious to identify with them bones from Northern Queensland merely on account of correspondence in size. The teeth of *M. faunus*, however, intimate that it was equal in dimensions to *M. magister*; and, since this indirect clue to the identification of bones of the larger kangaroos is the only one available, the specimens following are provisionally referred to *M. magister*: more especially as this happens to be the commonest of the extinct *Macropods*.

MACRUPUS MAGISTER, de Vis.

A fragment of the ischiadic bone of the pelvis —No. 3.

A fragment of the iliac bone of the pelvis.—No. 3.

A splinter from a long bone.—No. 6.

Fragment from the head of a tibia.—No. 11.

Head of a right tibia, articular surface fairly perfect.—No. 37.

Proximal two-thirds of a fifth metatarsal of a left foot.—No. 42.

Part of the distal end of a femur.—No number.

PHASCOLOMYIDÆ.

PHASCOLONUS GIGAS, Owen.

Remains of the distal third of a humerus.—No number.

Connected bones of the tarsus—namely, astragalus and calcaneum.—No. 27.

PHASCOLOMYS MITCHELLI, Owen.

A basal phalanx of the fifth toe of the right foot is probably referable to this Wombat or to one of about the same size.

REPTILIA.

CHELONIA.

CHELYMYS ARATA, de Vis.

Three pieces of the carapace.—No. 4.

CHELYMYS GRANULATA, de Vis.

One piece of the carapace.—No. 17 a.

PELOCOMASTES AMPLA, de Vis.

One piece of the carapace.—No. 17 a.

Two pieces of the plastron.—No. 26.

CROCODILIA.

PALLIMNARCHUS POLLENS, de Vis.

The greater part of a right mastoid, 87mm. broad on outer surface, with a portion of the attached exoccipital.—No. 20.

Portion of a malar, apparently, but scarcely determinable—No. 45

Several pieces of a decomposed skull, with a few teeth.—No. 45.

Fore end of a mandible, with symphysial surface and sockets of seven teeth, much waterworn.—No. 36.

Dorsal scute, 105mm. broad.

A rumour gone abroad on the banks of the Leichhardt has it that human bones have been seen in the bed of the river. The coloured natives around are said to declare that they are the "bones of blackfellows turned to stone." One must be cautious about giving implicit credence to an assertion which, on first hearing, is, to say the least, startling. Yet the blacks, whose care of the bones of their dead should make them familiar with those relics, ought to be able to distinguish them at sight from bones of other animals, and what they might hope to gain by pretending to recognise them among others is not clear. Whatever of truth or falsity there may be in the rumour, the relics in question are, presumably, still on the spot; but, as Mr. Buhot found, covered up by some tons of conglomerate—the result of a late slip from the bank. The discovery of relics of human origin

in company with the bones of our extinct animals would not be unprecedented ; that discovery has already been made in Victoria * But further evidence is so very desirable that no seeming opportunity of obtaining it should be lost. In the present instance, the question raised on the banks of the Leichhardt should be settled by a thorough search of the spot in which the bones are said to lie, and this search is strongly recommended.

* I take the opportunity of mentioning a fact of some importance which was omitted from my notice of the implement and bones found in Victoria. (R. Soc. Vict. 1899, p. 81.) I should not have failed to say that they occurred beneath a bed of basalt.
